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(541) 383-9310 FAX 382-7588

**Work Order #:**

M 108011 P1 H 0256

**TURNAROUND REQUEST in Business Days\***

Organic &amp; Inorganic Analyses

10	7	5	4	3	2	1	<1
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*STD.*

### Petroleum Hydrocarbon Analyses

5 4 3 2 1 <1

STD.

Please Specify

## OTHER

*\*Turnaround Requests less than standard may incur Rush Charges.*

[illegible][illegible]

RELINQUISHED BY: <i>Charlie Marshall</i>	DATE: <i>8/8/01</i>	RECEIVED BY: <i>Craig Brudie</i>	DATE: <i>8/8/01</i>
PRINT NAME: <i>Charlie Marshall</i> FIRM: <i>BRISTOL</i>	TIME: <i>0910</i>	PRINT NAME: <i>Craig Brudie</i> FIRM: <i>NCA</i>	TIME: <i>0910</i>
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME: FIRM:	TIME:	PRINT NAME: FIRM:	TIME:
ADDITIONAL REMARKS: <i>Last Treated Effluent water sample from the Lagoon</i>			TEMP: <i>6.4°</i>
COC REV 3/99			PAGE <i>1</i> OF <i>1</i>



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223  
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541.383.9310 fax 541.382.7588

7 December, 2001

Anne Kranawetter  
Bristol Environmental & Engineering  
2000 W International Airport C#1  
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 08/08/01 09:10. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson  
Environmental Group Leader

Work Orders included in this report:

**M108011**



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Bristol Environmental & Engineering  
2000 W International Airport C#1  
Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
08/13/01 18:07

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMTE15SW	M108011-01	Water	08/08/01 08:45	08/08/01 09:10

C. O. C. # 220

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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**North Creek Analytical, Inc.**  
**Environmental Laboratory Network**

1 of 8



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Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
08/13/01 18:07

## Polychlorinated Biphenyls per EPA Method 8082

### North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>01AMTE15SW (M108011-01) Water</b>						Sampled: 08/08/01	Received: 08/08/01	<b>A-01</b>	
Aroclor 1016	ND	0.200	ug/l	1	EPA 8082	08/09/01	08/10/01	0108027	
Aroclor 1221	ND	0.400	"	"	"	"	"	"	
Aroclor 1232	ND	0.200	"	"	"	"	"	"	
Aroclor 1242	ND	0.200	"	"	"	"	"	"	
Aroclor 1248	ND	0.200	"	"	"	"	"	"	
Aroclor 1254	ND	0.200	"	"	"	"	"	"	
Aroclor 1260	ND	0.200	"	"	"	"	"	"	
Surr: 2,4,5,6-Tetrachloro-m-xylene	60.2 %	44-119							
Surr: Decachlorobiphenyl	129 %	54-128							S-07

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
08/13/01 18:07

**Conventional Chemistry Parameters per APHA/EPA Methods**  
**North Creek Analytical - Mobile Lab**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>01AMTE15SW (M108011-01) Water</b>						Sampled: 08/08/01 Received: 08/08/01			
Biochemical Oxygen Demand	ND	4.00	mg/l	1	EPA 405.1	08/08/01	08/13/01	0108021	
<b>Dissolved Oxygen</b>	<b>9.89</b>	1.00	"	"	EPA 360.1	08/08/01	08/08/01	0108020	
<b>pH</b>	<b>7.80</b>	0.100	pH Units	"	EPA 150.1	"	"	"	
Total Suspended Solids	ND	10.0	mg/l	"	EPA 160.2	08/08/01	08/08/01	0108022	

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
08/13/01 18:07

**Microbiological Parameters per APHA Standard Methods**  
**North Creek Analytical - Mobile Lab**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>01AMTE15SW (M108011-01) Water</b>					Sampled: 08/08/01 Received: 08/08/01				
E. Coli	ND	2.00MPN/100 ml	1		SM 9221	08/08/01	08/09/01	0108025	
<b>Total Coliforms</b>	<b>2420</b>	2.00	"	"	"	"	"	"	A-01a

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Project: Amchitka  
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**Reported:**  
08/13/01 18:07

### Polychlorinated Biphenyls per EPA Method 8082 - Quality Control

#### North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 0108027 - 3520B Liq-Liq

<b>Blank (0108027-BLK1)</b>				Prepared: 08/09/01 Analyzed: 08/10/01				<b>A-01</b>		
Aroclor 1016	ND	0.200	ug/l							
Aroclor 1221	ND	0.400	"							
Aroclor 1232	ND	0.200	"							
Aroclor 1242	ND	0.200	"							
Aroclor 1248	ND	0.200	"							
Aroclor 1254	ND	0.200	"							
Aroclor 1260	ND	0.200	"							
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	0.142		"	0.400		35.5	44-119			S-07
<i>Surr: Decachlorobiphenyl</i>	0.477		"	0.400		119	54-128			

<b>LCS (0108027-BS1)</b>				Prepared: 08/09/01 Analyzed: 08/10/01				<b>A-02</b>		
Aroclor 1254	0.900	0.200	ug/l	1.00		90.0	47-155			
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	0.259		"	0.400		64.7	44-119			
<i>Surr: Decachlorobiphenyl</i>	0.488		"	0.400		122	54-128			

<b>LCS Dup (0108027-BSD1)</b>				Prepared: 08/09/01 Analyzed: 08/10/01				<b>A-02</b>		
Aroclor 1254	0.872	0.200	ug/l	1.00		87.2	47-155	3.16	50	
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	0.208		"	0.400		52.0	44-119			
<i>Surr: Decachlorobiphenyl</i>	0.450		"	0.400		112	54-128			

North Creek Analytical - Mobile Lab

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Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116	Project: Amchitka Project Number: 21090 Project Manager: Anne Kranawetter	<b>Reported:</b> 08/13/01 18:07
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### Conventional Chemistry Parameters per APHA/EPA Methods - Quality Control

#### North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 0108020 - Wet Chem

<b>Duplicate (0108020-DUP1)</b>	<b>Source: M108011-01</b>			Prepared & Analyzed: 08/08/01					
pH	7.80	0.100	pH Units		7.80		0	200	

#### Batch 0108021 - Wet Chem

<b>Blank (0108021-BLK1)</b>	Prepared: 08/08/01 Analyzed: 08/13/01								
Biochemical Oxygen Demand	ND	4.00	mg/l						

<b>LCS (0108021-BS1)</b>	Prepared: 08/08/01 Analyzed: 08/13/01								
Biochemical Oxygen Demand	215	4.00	mg/l	198		109 75-125			

<b>Duplicate (0108021-DUP1)</b>	<b>Source: M108011-01</b>			Prepared: 08/08/01 Analyzed: 08/13/01					
Biochemical Oxygen Demand	ND	4.00	mg/l		ND		6.81	40	

#### Batch 0108022 - Wet Chem

<b>Blank (0108022-BLK1)</b>	Prepared & Analyzed: 08/08/01								
Total Suspended Solids	ND	10.0	mg/l						

<b>LCS (0108022-BS1)</b>	Prepared & Analyzed: 08/08/01								
Total Suspended Solids	143	10.0	mg/l	120		119 80-120			

<b>Duplicate (0108022-DUP1)</b>	<b>Source: M108011-01</b>			Prepared & Analyzed: 08/08/01						<b>Q-05</b>
Total Suspended Solids	ND	10.0	mg/l		ND		40.0	20		

North Creek Analytical - Mobile Lab

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2000 W International Airport C#1  
Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
08/13/01 18:07

### Microbiological Parameters per APHA Standard Methods - Quality Control

#### North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 0108025 - Wet Chem

##### Blank (0108025-BLK1)

Prepared: 08/08/01 Analyzed: 08/09/01

E. Coli	ND	2.00	MPN/100 ml
Total Coliforms	ND	2.00	"

North Creek Analytical - Mobile Lab

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**Reported:**  
08/13/01 18:07

### Notes and Definitions

A-01 CCV result above acceptance criteria. Sample results are non detect and are not affected. DoD QSM Draft 5.9.4.2.E.1  
A-01a The reported total coliform result is greater than 2420. Additional dilutions were not prepared  
A-02 CCV result above acceptance criteria.  
Q-05 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit.  
S-07 Surrogate recovery is out of control limits. QA criteria are met when one surrogate is within control limits.  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.  
wet Sample results reported on a wet weight basis (as received)  
RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

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**Environmental Laboratory Network**

8 of 8

### Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M108011 FINAL 08 13 01 1807.mdb Default Report (not modified)
0108022-DUP1	Solids, TSS-160.2		Q-05
0108022-DUP1	Solids, TSS-160.2	Total Suspended Solids	Exceeds RPD limit
0108027-BLK1	8082 PCB		A-01
0108027-BLK1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	S-07
0108027-BLK1	8082 PCB	2,4,5,6-Tetrachloro-m-xylene	Exceeds lower control limit
0108027-BS1	8082 PCB		A-02
0108027-BSD1	8082 PCB		A-02
M108011-01	8082 PCB		A-01
M108011-01	8082 PCB	Decachlorobiphenyl	S-07
M108011-01	8082 PCB	Decachlorobiphenyl	Exceeds upper control limit
M108011-01	TC MPN-SM9221	Total Coliforms	A-01a